

1 Teresa M. Corbin (SBN 132360)
Christopher Kelley (SBN 166608)
2 Jaclyn C. Fink (SBN 217913)
HOWREY LLP
3 525 Market Street, Suite 3600
San Francisco, California 94105
4 Telephone: (415) 848-4900
Facsimile: (415) 848-4999
5

6 Attorneys for Plaintiff SYNOPSYS, INC.
and for Defendants AEROFLEX INCORPORATED,
7 AMI SEMICONDUCTOR, INC., MATROX
ELECTRONIC SYSTEMS, LTD., MATROX
8 GRAPHICS, INC., MATROX INTERNATIONAL
CORP., MATROX TECH, INC. and AEROFLEX COLORADO SPRINGS, INC.

9 UNITED STATES DISTRICT COURT
10 NORTHERN DISTRICT OF CALIFORNIA
11 SAN FRANCISCO DIVISION
12

13 RICOH COMPANY, LTD.,

14 Plaintiff,

15 vs.

16 AEROFLEX INCORPORATED, et al.,

17 Defendants.
18

19 SYNOPSYS, INC.,

20 Plaintiff,

21 vs.

22 RICOH COMPANY, LTD.,

23 Defendant.
24
25
26
27
28

) Case No. C03-04669 MJJ (EMC)

) Case No. C03-2289 MJJ (EMC)

) **DEFENDANTS' NOTICE OF MOTION AND**
) **MOTION FOR SUMMARY JUDGMENT OF**
) **NONINFRINGEMENT UNDER 35 U.S.C.**
) **§271(g)**

) Date: September 13, 2005

) Time: 9:30 a.m.

) Courtroom: 11, 19th Floor

) Judge: Martin J. Jenkins

TABLE OF CONTENTS

1		
2	MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF MOTION	3
3	I. STATEMENT OF ISSUES TO BE DECIDED	3
4	II. INTRODUCTION AND SUMMARY OF ARGUMENT	4
5	III. AS A MATTER OF LAW, THE CUSTOMER DEFENDANTS	
6	CANNOT BE HELD LIABLE AS INFRINGERS UNDER SECTION	
7	271(G).....	9
8	A. Legal Standard For Summary Judgment	9
9	B. The Court Has Already Construed The Claims-At-Issue To	
10	Exclude Manufacturing	10
11	C. The Federal Circuit's Decision In <i>Bayer AG v. Housey</i>	
12	<i>Pharmaceuticals</i> Is Dispositive Of The Section 271(g)	
13	Infringement Claim Against The Customer Defendants	10
14	1. The Language of the Statute.....	10
15	2. Section 271(g) Infringement Is Limited To The	
16	Manufacture Of "Physical Goods" And Does Not	
17	Encompass Generation Of "Information"	11
18	3. Section 271(g) Infringement Is Limited To Processes Used	
19	<i>Directly</i> in the Manufacture of Physical Products, And	
20	Does Not Encompass "Predicate" Processes	12
21	IV. CONCLUSION	15
22		
23		
24		
25		
26		
27		
28		

TABLE OF AUTHORITIES

CASES

<i>Anderson v. Liberty Lobby</i> , 477 U.S. 242 (1986).....	9
<i>Barmer Maschinenfabrik AG v. Murata Mach., Ltd.</i> , 731 F.2d 831 (Fed. Cir. 1984).....	9
<i>Bayer AG v. Housey Pharmaceuticals, Inc.</i> , 340 F. 3d 1367 (Fed. Cir. 2003)	3, 13, 14
<i>Bio-Technology General Corp. v. Genentech, Inc.</i> , 80 F.3d 1553 (Fed. Cir. 1996)).....	14
<i>Celotex Corp. v. Catrett</i> , 477 U.S. 317 (1986).....	9
<i>Colgate Palmolive Co. v. W.L. Gore & Assoc., Inc.</i> , 919 F. Supp. 767 (D. N.J. 1996).....	9
<i>Matsushita Elec. Indus. Co. v. Zenith Radio Corp.</i> , 475 U.S. 574 (1986)	10
<i>Tinoco v. Belshe</i> , 916 F. Supp. 974 (N.D. Cal. 1995)	9

STATUTES

19 U.S.C. § 1337	12
35 U.S.C. § 271(g).....	passim

OTHER AUTHORITIES

Process Patents Amendments Act	12
--------------------------------------	----

RULES

Federal Rules of Civil Procedure 12(b)(6)	3
Federal Rules of Civil Procedure 56	2

NOTICE OF MOTION AND RELIEF SOUGHT

Please take notice that, on September 13, 2005 at 9:30 a.m., before the Honorable Martin J. Jenkins in Courtroom 11, 19th Floor, in the United States District Court, 450 Golden Gate Avenue, San Francisco, California, Defendants Aeroflex Incorporated ("Aeroflex"), AMI Semiconductor, Inc. ("AMI"), Matrox Electronic Systems, Ltd. ("Matrox Electronics"), Matrox Graphics, Inc. ("Matrox Graphics"), Matrox International Corp. ("Matrox International"), Matrox Tech, Inc. ("Matrox Tech") and Aeroflex Colorado Springs, Inc. ("UTMC") (collectively the "Customer Defendants") will each seek a judgment from the Court, pursuant to Rule 56 of the Federal Rules of Civil Procedure, that they do not infringe claims 13-17 of United States Patent No. 4,922,432 (the "432 patent") under 35 U.S.C. § 271(g). This motion is based upon the following memorandum of points and authorities, the accompanying declarations of Erik Olson and Dr. Michael Heynes, the oral arguments of counsel at the hearing on this motion, and all other pleadings and matters of record in this action and in the related declaratory judgment action entitled *Synopsys, Inc. v. Ricoh Company, Ltd.*, N.D. Cal. Case No. C 03 02289 MJJ.¹

¹ The issue presented by this motion was previously submitted to this Court as a Motion For Judgment On The Pleadings Pursuant To Rule 12 (c). The Court held a hearing on April 6, 2004 and issued an order on April 22, 2004 denying the motion because "on the limited record before the Court, defendants have failed to show that the patented process is not used directly in the manufacture of a physical good." Order Denying Defendants' Motion For Judgment on The Pleadings And Granting Plaintiff's Motion To Amend, at p. 2.

1 **MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF MOTION**

2 **I. STATEMENT OF ISSUES TO BE DECIDED**

3 *Whether claims 13 through 17 of the '432 patent, which describe design processes the result of*
 4 *which is design information, and which the Court has already construed as not covering the*
 5 *manufacturing process for ASICs, can provide liability under U.S.C. § 271(g), which requires that the*
 6 *patented process be used directly in the manufacture of the accused physical products.*

7 In *Bayer AG v. Housey Pharmaceuticals, Inc.*, 340 F. 3d 1367, 1369-70 (Fed. Cir. 2003), the
 8 Federal Circuit affirmed the dismissal under Rule 12(b)(6) of a patent infringement claim arising under
 9 35 U.S.C. § 271(g), holding that information or data is not “a product which is made by a process”
 10 under Section 271(g), and that a “predicate process to identify the product to be manufactured” (rather
 11 than a process used directly in the manufacture of the product) is not sufficiently related to the accused
 12 product to warrant a claim for infringement under Section 271(g). In other words, infringement under
 13 Section 271(g) is strictly limited to physical goods that are manufactured *directly* by the patented
 14 processes.

15 The use of the computer-aided design methods of claims 13-17 of the '432 patent result in the
 16 production of design information, specifically a netlist—and in the case of claim 14, only, mask data.
 17 Claims 13-17 are not directed to methods of manufacture at all. Given that the patented '432 method
 18 generates only design information, and Section 271(g) infringement is limited to physical goods that
 19 are manufactured directly using the patented processes, the Court must decide whether the '432
 20 patent's design information could reasonably be characterized as “a product which is made by a
 21 [patented] process.”

22 Next, as noted above, the use of the '432 patent's method results in the design information
 23 only. The netlist of claim 13 is eventually, and after many other essential and complex processes not
 24 described in the '432 patent, used to generate the mask data of claim 14. *See* Declaration of Erik
 25 Olson (“Olson Decl.”) at ¶¶ 2-7. While Claim 13-17's processes are not used in the manufacture of
 26 masks or ASICs, Claim 14's end product, i.e., mask data, is used in the complex processes of
 27 photomask production. These photomask production processes are neither described nor claimed in
 28 the '432 patent. The results of these complex processes of photomask production are *physical*

1 photomasks, sometimes called reticles. It is these photomasks that are then used in some of the
 2 processes, consisting of hundreds of individual steps, that actually manufacture the integrated circuits.
 3 See Declaration of Dr. Michael Heynes ("Heynes Decl.") ¶¶ 3-20. Given that the '432 patent's
 4 processes result in design information, are not directed to manufacture of any physical product, the
 5 resultant design information can only be used to make photomasks, not the accused ASICs, and that
 6 infringement under Section 271(g) is limited to processes "used directly in the manufacture of the
 7 [accused] product," the Court must also decide whether the use of the '432 patent's computer-aided
 8 design method could reasonably be defined as a process "used directly in the manufacture" of an
 9 ASIC.

10 If the answer to these questions is "No," the Court should grant summary judgment of
 11 noninfringement under § 271(g) in favor of the Customer Defendants.

12 II. INTRODUCTION AND SUMMARY OF ARGUMENT

13 Plaintiff Ricoh Company ("Rico") asserts that the Customer Defendants are infringing the
 14 '432 patent, which purports to disclose and claim computer-aided design methods. In particular,
 15 Ricoh's Amended Complaint filed on April 12, 2004, asserts, among other things, that the Customer
 16 Defendants have been and are infringing the '432 patent by "selling, offering to sell and/or importing
 17 into the United States, application specific integrated circuits made with the use and/or by the process
 18 of one or more of claims 13-17 of the '432 patent. . ." See Amended Complaint at ¶¶ 17, 23, 29, 35,
 19 41, 47 and 53.

20 At the heart of this case is each of the Customer Defendants' alleged use of Synopsys' product
 21 called "Design Compiler," a type of Electronic Design Automation ("EDA") software that has been on
 22 the market since at least June 1988.² While the Customer Defendants' use of Design Compiler for
 23 their design work does not infringe any of the '432 patent claims, for purposes of this motion, the
 24 function of the Design Compiler software and the Customer Defendants' usage of the software is

27 ² While Ricoh's Preliminary Infringement Contentions reference several Synopsys products, they are collectively
 28 referenced herein as "Design Compiler."

1 irrelevant. The sole issue is whether the patented computer-aided design method in the '432 patent
2 falls within the purview of 35 U.S.C. § 271(g).³

3 In general, the '432 patent purports to describe a computer-aided method for designing an
4 application specific integrated circuit, or "ASIC." Claims 13-17 are all explicitly directed to a "design
5 process for designing an application specific integrated circuit" —not a process for manufacturing
6 them. '432 patent at Col. 16, lines 34-35; 66; Col. 17, lines 1, 4, 8, 11-12; Col. 18, lines 15, 22. That
7 Claims 13-17 are not processes for manufacturing ASICs is also demonstrated by the fact that these
8 processes only generate design information or data that—at best—can only be used in the photomask
9 manufacturing process. *See, e.g.*, '432 patent, Claim 13 at Col. 16, lines 61-65; Claim 14 at Col. 16,
10 lines 66-68 (claim 14's process generates mask data from the netlist generated by claim 13's process).
11 *See also* Heynes Decl. ¶¶ 18-20.

12 In particular, the processes of claims 13 and 15-17 only generate a netlist. '432 patent at Col.
13 16, lines 61-65; Col. 17, lines 1-11; Col. 18, lines 10-24. A netlist is nothing more than a structural
14 level design specification of an integrated circuit- i.e., a list identifying the hardware cells and their
15 interconnection requirements. *Id.*; '432 patent, Abstract at lines 17-18 ("This list of hardware cells and
16 their interconnection requirements is set forth in a netlist."); '432 patent, Summary Of The Invention at
17 Col. 2, lines 43-45 ("The list of hardware cells and their interconnection requirements may be
18 represented in the form of a netlist."); *see also*, '432 patent at Col. 1, lines 38-40. The process of claim
19 14 merely generates "mask data" from the netlist generated by the process of claim 13. '432 patent at
20 Col. 16, lines 66-68. According to the '432 patent, mask data is geometrical information, which
21
22

23 ³ The resolution of the dispute between the parties regarding the scope of 35 U.S.C. §271(g) will have a profound impact
24 on 1) what is at issue in this action, 2) the scope of relevant discovery, 3) the damages recoverable by Ricoh, if any and 4)
25 the potential for a business resolution of this case. If summary judgment of noninfringement under §271(g) is granted,
26 Ricoh's remaining infringement claims will be based on §271(a) and will be necessarily limited to the Customer
27 Defendants who actually use the '432 patented processes in the United States, as would the relevant discovery. The scope
28 of potential damages too would be significantly narrowed. Damages under a §271(a) theory of infringement would be
based on the use of the software that allegedly performs the patented processes of the '432 patent in the United States, i.e.,
the licensing fees paid by the Customer Defendants for that software as opposed to Ricoh's damage theory, which is based
upon the price of ASICs imported and sold within the United States. This significant narrowing of the case could have a
dramatic impact on settlement prospects.

1 provides the physical layout level description of the topological characteristics of the integrated circuit.
 2 '432 patent at Col. 1, lines 38-44; Col. 2, lines 44-49; Abstract at lines 19-23.

3 To produce mask data from a netlist, a multitude of additional processes not described or
 4 claimed in the '432 patent are required.⁴ These include:

- 5 1. verifying that the identified components and their
 6 interconnection, as defined in the netlist, match the
 7 functional description and design constraints provided by
 8 the user;
- 9 2. generating the design information known as physical
 10 layout using software for placement and routing of the
 11 components and their interconnections;
- 12 3. verifying the physical layout with other software
 13 processes such as those for timing characterization, design
 14 rule checking, etc;
- 15 4. fracturing (or mask data-preparation) of the physical
 16 layout to generate the instructions used by the electron
 17 beam machine to make the photomasks.

18 See Olson Decl. at ¶¶ 2-7.⁵

19 This mask data is used in the complex processes of photomask manufacture, which are neither
 20 claimed nor described in the '432 patent. Photomask manufacture includes photomask generation,
 21 prototype chip verification, and qualification for transfer to ASIC manufacturing. Heynes Decl. at ¶ 5.
 22 The major steps of photomask generation include: 1) the mask-making company receives a computer
 23 file containing the design for each photomask; 2) a blank, chrome-coated or other type of film-coated
 24 quartz plate is covered with photoresist or electron beam resist (photo-sensitive polymer or plastic
 25 sensitive to light or electron beams, respectively), 3) the plate is processed in a computer-controlled
 26 electron beam (e-beam) tool or a laser pattern generator that exposes the desired pattern in the resist
 27 through multiple exposure steps (the mask data is used to produce instructions for the machine that
 28 creates the pattern in the resist), 4) developer solution removes the unwanted resist, creating the

⁴ The '432 patent merely states that "The netlist can be used as input to any existing VLSI layout and routing tool 16 to create mask data 18 for geometrical layout." '432 patent Col.4, lines, 44-46; see also '432 patent Abstract.

⁵ For a further detailed explanation of the steps including within each of these high level steps 1-4, and identification of some of the Synopsys tools users would typically employ at each step, see specifically Olson Decl. at ¶ 7.

1 desired pattern and the pattern is inspected, 5) etching to remove the chrome not protected by the resist
2 pattern, 6) removing resist mask and 7) inspection. *Id.* at ¶ 6. The end result of these processing steps
3 is the creation of the desired pattern in the chrome layer on the glass surface, which can then be used as
4 a mask. Typically at least 25 to 30 masks are required to manufacture one ASIC. Once the
5 photomasks have been made, the hundreds of steps necessary for actually manufacturing the integrated
6 circuit can proceed using those photomasks. *Id.* at ¶ 7.

7 After the prototype photomasks are generated, there is a prototype chip verification. This
8 verification includes: 1) running a small number of wafers using the new prototype photomasks, 2)
9 electrically testing chips, in wafer form, 3) assembling and packaging chips, and 4) electrically testing
10 packaged chips. *Id.* at ¶ 8. Once prototype chip verification is complete, the qualification for transfer
11 to chip manufacturing occurs. Qualification includes up to thousands of computer-controlled electrical
12 tests to characterize the product in terms of performance. Qualification can also include reliability
13 testing, such as burn-in and temperature/humidity tests. *Id.* at ¶ 9. After the prototype chip
14 verification and qualification are successfully completed, the photomasks are considered to be
15 finalized. *Id.* at ¶ 10.

16 ASIC manufacture includes the high level steps of wafer fabrication and assembly and test. *Id.*
17 at ¶ 11. ASIC manufacture begins with wafer fabrication. Typically, two to three hundred ASIC
18 devices are formed on a single wafer. Wafer fabrication minimally involves many hundreds of
19 individual steps. These steps can be broken down and fall into two categories, the front end of the line
20 (FEOL) and the back end of the line (BEOL). In the FEOL, the transistors and other devices are
21 formed in the wafer surface. In the BEOL, the devices are wired together with metallization processes
22 and the circuit is protected with a final sealing layer. These ASIC manufacturing steps are neither
23 claimed nor described in the '432 patent. They typically include, but are not limited to, processes such
24 as chemical vapor deposition, physical vapor deposition, etching, and chemical mechanical polishing.
25 *Id.* at ¶ 12. The wafer fabrication process falls into four basic operations. They are layering,
26 patterning, doping and heat treatments, as further defined in the Heynes Declaration at ¶ 14. These
27 processes are used repeatedly in the wafer fabrication process. The exact sequence is determined by
28

1 the “construction” of the transistor used along with other physical attributes of the circuit components,
2 and the interconnection wiring of the circuits.

3 After wafer fabrication, the circuits on the wafer are complete but still in wafer form and have
4 not yet been tested. During wafer sort, each circuit is electrically tested to ensure that it meets
5 customer specifications. Once the specification compliant circuits are identified, packaging begins.
6 The industry also refers to this phase of chip manufacture as assembly and test (A/T). During this
7 phase, final testing of the chip takes place, the wafers are separated, or diced, into individual chips and
8 placed into protective packages to protect the chip from contamination and damage. Packaging
9 typically takes place in a separate department of the semiconductor producer or often in a foreign
10 plant. After packaging, there are further electrical tests, which are even more extensive than the
11 electrical tests carried out at the wafer level. The packaged and tested chips are then sent to the
12 customers. *Id.* at ¶¶ 13, 15-17.

13 Thus, based on claims 13-17 and the ‘432 Patent’s description it is beyond dispute that claims
14 13-17’s processes are not processes for “directly manufacturing” ASICs as required for an
15 infringement claim pursuant to Section 271(g). *Id.* at ¶ 18.

16 The Federal Circuit has confirmed that Section 271(g) can apply only to the importation and
17 sale of “physical objects” derived from manufacturing processes and that “the production of
18 information is not within the scope of processes of ‘manufacture.’” The Federal Circuit also confirmed
19 that patent infringement relief is available only for patented processes used *directly* in the manufacture
20 of *physical goods*. In this case, however, the patented ‘432 methods generate *information* for the
21 design of an ASIC and do not involve manufacture at all. While the design information, particularly
22 the mask data, is used in the manufacture of photomasks, it is not used directly in the manufacture of
23 ASICs. None of these additional steps is part of the patented process. *Id.* at ¶ 19. In other words, the
24 ‘432 patent does not even purport to cover the manufacture or production of an ASIC—or any physical
25 product—but instead sits many steps back at the design information level. This Court’s Claim
26 Construction Order confirmed that the “computer aided design process” described in claim 13 of the
27 ‘432 patent “does not include a manufacturing process for ASICs.” Claim Construction Order at 7-8.

1 Accordingly, as a matter of law, the Customer Defendants cannot infringe the '432 patent under
 2 § 271(g)—and the Court should grant summary judgment of noninfringement of the '432 patent under
 3 § 271(g).

4 **III. AS A MATTER OF LAW, THE CUSTOMER DEFENDANTS CANNOT BE HELD**
 5 **LIABLE AS INFRINGERS UNDER SECTION 271(g).**

6 **A. Legal Standard For Summary Judgment**

7 Summary judgment is just as reasonable in a patent case as in any other case. *See Barmag*
 8 *Barmer Maschinenfabrik AG v. Murata Mach., Ltd.*, 731 F.2d 831, 835 (Fed. Cir. 1984). When facts
 9 conclusively establish that a patent is not infringed, there is no reason to allow the case go to a jury.
 10 *Cf. id.* Moreover, “[s]ummary judgment is not a disfavored procedural shortcut, but rather an essential
 11 thread in the fabric of the Federal Rules that eliminates unfounded claims without recourse to a costly
 12 and lengthy trial.” *Colgate Palmolive Co. v. W.L. Gore & Assoc., Inc.*, 919 F. Supp. 767, 769 (D. N.J.
 13 1996). Once a party has made an initial showing that summary judgment is warranted, the opposing
 14 party may not rest upon pleadings; rather, “the non-moving party must ‘designate specific facts
 15 showing that there is a genuine issue for trial.’” *Tinoco v. Belshe*, 916 F. Supp. 974, 979 (N.D. Cal.
 16 1995) (quoting *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986)). Here, the Court must carefully
 17 scrutinize any evidence proffered by Ricoh to determine if it raises a genuine issue of material fact as
 18 to whether the Customer Defendants could infringe the '432 patent under § 271(g). The Court may
 19 grant summary judgment if Ricoh’s evidence “is merely colorable, or is not significantly probative.”
 20 *Tinoco*, 916 F. Supp. at 979 (quoting *Anderson v. Liberty Lobby*, 477 U.S. 242, 249-250 (1986)).

21 In this case, summary judgment is warranted because the '432 patent purports to describe a
 22 process of *design*, the result of which is information; it does *not* describe a process for the manufacture
 23 of an ASIC or of any physical product. The Court has already determined that the “computer aided
 24 design process” described in claim 13 of the patent at issue in this case “does not include a
 25 manufacturing process for ASICs.” Claim Construction Order at 7-8. It is an irrefutable fact that a
 26 “computer aided design process,” the resulting information of which is not used directly in the
 27 manufacture of the accused product, cannot provide the basis for infringement liability under Section
 28 271(g). Accordingly, there is no reason the infringement claims under § 271(g) against the Customer

Defendants should go to the jury, and the Court should grant summary judgment of noninfringement under Section 271(g). *See Anderson v. Liberty Lobby*, 477 U.S. at 252; *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986).

B. The Court Has Already Construed The Claims-At-Issue To Exclude Manufacturing

The Court has already determined that the “computer aided design process” described in claim 13 of the ‘432 patent “does not include a manufacturing process for ASICs.” Claim Construction Order at 7-8. The Court came to this conclusion even though Ricoh asserted that the term means, “during manufacture of a desired application specific integrated circuit (ASIC) chip . . . a process of designing the desired ASIC using a computer.” Claim Construction Order at 6. The Court indicated that, “Ricoh’s proposed definition is problematic because it clearly attempts to blur the line between the process of designing integrated circuits and the process of manufacturing integrated circuits.” *Id.* at 7. The Court also found that even though a netlist may be required to produce an ASIC, “that does not compel the conclusion that the ‘432 patent’s design process is inherently a part of the manufacturing process of the actual ASIC chips.” *Id.*

C. The Federal Circuit’s Decision In *Bayer AG v. Housey Pharmaceuticals* Is Dispositive Of The Section 271(g) Infringement Claim Against The Customer Defendants

1. The Language of the Statute

One of Ricoh’s theories of infringement against the Customer Defendants arises under 35 U.S.C § 271(g), which provides:

Whoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent. In an action for infringement of a process patent, no remedy may be granted for infringement on account of the noncommercial use or retail sale of a product unless there is no adequate remedy under this title for infringement on account of the importation or other use, offer to sell, or sale of that product. A product which is made by a patented process will, for purposes of this title, not be considered to be so made after - (1) it is materially changed by subsequent processes; or (2) it becomes a trivial and nonessential component of another product.

35 U.S.C. § 271(g).

2. **Section 271(g) Infringement Is Limited To The Manufacture Of “Physical Goods” And Does Not Encompass Generation Of “Information”**

In *Bayer AG v. Housey Pharmaceuticals, Inc.*, the Federal Circuit clarified the meaning of the phrase “a product which is made by a process” to require the manufacture of a physical product by an alleged infringer, and in doing so obviated one of Ricoh’s alleged avenues of relief against the Customer Defendants. The Federal Circuit reviewed the dismissal by the Delaware District Court of Housey’s counterclaim of patent infringement, for failure to state a claim against Bayer under Section 271(g). In response to Bayer’s declaratory relief action, Housey alleged that Bayer infringed its patented methods of screening compounds for their ability to inhibit or activate proteins in a cell. The result of the patented screening process was information used to identify and describe new drugs that could then be manufactured using that information. *See Bayer*, 340 F. 3d at 1369-70.

The parties in *Bayer* agreed that the scope of the counterclaim for infringement extended to both the importation of a drug identified by the patented process as a protein inhibitor or activator, as well as to the importation into or use in the United States of information generated by the patented process, *i.e.*, “knowledge and information reflecting the identification or characterization of a drug acquired from using the patented methods.” *Id.* at 1370.

In addressing both theories of infringement, the court analyzed both the language and legislative history of Section 271(g) in detail, including a discussion of the enactment of the Process Patents Amendments Act, drafted in response to concerns that competitors could avoid infringement of method patents by employing those methods abroad, and then importing the resulting products into the United States. *Id.* at 1373-74. The Act supplemented existing remedies available from the International Trade Commission (“ITC”) under 19 U.S.C. § 1337 (including in its definition of “unfair methods of competition” the importation into or the sale within the United States of articles made by means of a process covered by a United States patent). *See id.* (citing 19 U.S.C. § 1337(a)(1)(B)). The court’s analysis of the phrase “product which is made by a process,” along with its extensive review of the legislative history, led the Federal Circuit to conclude: “that Congress was concerned solely with physical goods that had undergone manufacture.” *Id.* The court noted, “Each and every reference to the provision that became section 271(g) describes it as directed to manufacturing.” *Id.* at 1374.

1 Accordingly, the Federal Circuit held that Section 271(g) can apply only to the importation or sale of
 2 “physical objects” derived from manufacturing processes, and that “the production of information is
 3 not within the scope of processes of ‘manufacture.’” *Id.* at 1376-77.⁶

4 As such, any circuit-design information generated by the design processes of Claims 13-17 is
 5 not a physical object, and thus it cannot be a “product which is made by a process” under Section
 6 271(g). Therefore, the Customer Defendants cannot, as a matter of law, be found to infringe the ‘432
 7 patent under § 271(g).

8 **3. Section 271(g) Infringement Is Limited To Processes Used *Directly* in the**
 9 **Manufacture of Physical Products, And Does Not Encompass “Predicate”**
 10 **Processes**

11 Ricoh’s allegations of patent infringement against the Customer Defendants include the claim
 12 that they are infringing the ‘432 patent by “selling, offering to sell and/or importing into the United
 13 States application specific integrated circuits made with the use and/or by the process of one or more
 14 of claims 13-17 of the ‘432 patent. . .” See Amended Complaint at ¶¶ 17, 23, 29, 35, 41, 47 and 53.

15 As indicated above, the Federal Circuit’s analysis, in the *Bayer* decision, did not end with the
 16 Court’s holding that information is not a “product” under Section 271(g). Because Housey’s claim of
 17 infringement against Bayer also included actual drug products that Housey alleged Bayer had
 18 manufactured using the process described in the patent-in-suit, the Court went on to assess the merits
 19 of those assertions as well. See *Bayer*, 340 F.3d at 1376-77. Neither the court nor the parties disputed
 20 the fact that such drugs were physical products that had been manufactured. See *id.* at 1377. Here
 21 Ricoh has similarly asserted that the Customer Defendants are infringing its process claims via
 22 importation or sale of ASICs. See Amended Complaint at ¶¶ 17, 23, 29, 35, 41, and 47. The Customer
 23 Defendants do not dispute that an ASIC is a manufactured product. The issue here, however, as it was

24
 25 ⁶ The Court found further indications that the statute was concerned exclusively with physical goods produced by a
 26 manufacturing process in the statutory exceptions to Section 271(g). For example, the statute rules out infringement where
 27 an allegedly infringing product “is materially changed by subsequent processes.” 35 U.S.C. § 271(g)(1). The Court found
 28 Housey’s assertion—that the information itself was a “product”—difficult to reconcile with the exception, “which appears
 to contemplate a change in a physical product.” *Bayer*, 340 F.3d at 1373. Similarly, the Court found that the second
 exception under Section 271(g), which excludes infringement where an accused product “becomes a trivial and
 nonessential component of another product,” appears to contemplate a physical product. *Id.*

1 in *Bayer*, is the “necessary relationship between the ‘process patented in the United States’ and the
2 resulting product[.]” *Bayer*, 340 F.3d at 1377.

3 In determining whether a drug “identified as useful through the use of a patented process” was
4 a product made by that process under Section 271(g), the *Bayer* court observed that it was charged
5 with resolving the “critical question of proximity to the product of the patented process” on a case-by-
6 case basis. *Id.* at 1377 (quoting *Bio-Technology General Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1561
7 (Fed. Cir. 1996)). To assess this requisite “proximity,” the Federal Circuit turned once again to the
8 plain language of the statute, noting that it required the allegedly infringing product to have been
9 “made *by* a process patented in the United States.” *Id.* at 1377-78 (quoting 35 U.S.C. § 271(g))
10 (emphasis in original). The Court interpreted the word “by” to require that the process be used *directly*
11 in the manufacture of the product, “and not merely as a predicate process to identify the product to be
12 manufactured.” *Id.* at 1378. In *Bayer*, the patented process was not directed to manufacture of a
13 physical product but was a method for screening for protein inhibitors and activators whose end
14 product was the identification and generation of data regarding the characteristics of the compound of
15 interest. Accordingly, because Bayer did not use the patented process in the actual manufacturing of
16 the drug, the Court held that that drug was not a product “made by” those processes. *Id.* The Court
17 distinguished the facts in *Bayer* from those in *BioTechnology*, where the patented process was a
18 method of manufacture of a plasmid and the plasmid was used in the manufacture of the amino acid
19 expression product hGH. The Court stated in *Bayer*, unlike *Biotechnology*, the patented screening
20 process was not used in the actual synthesis of the drug product.

21 Likewise, the processes Ricoh claims under the ‘432 patent are not methods of manufacture at
22 all, and the design data they produce cannot be used *directly* in the manufacture of integrated circuits
23 (ASICs). Instead, and as discussed in detail above, such processes result in the generation of design
24 information only. Indeed, as in *Bayer*, such processes are merely predicates for the identification of
25 the product to be manufactured. *See id.* at 1378. More specifically, the process of claims 13-17
26 generate design information, i.e., “netlists” (claims 13, 15-17) and “mask data” (claim 14). The
27 specification of the ‘432 patent does not even teach anything about the complex processes and steps
28 necessary to transform a netlist into mask data, let alone the complex processes and steps necessary to

1 manufacture masks or ASICs. Thus, the requisite proximity of the teachings of the '432 patented
2 methods and ASICs is entirely lacking. Moreover, as described above, even the mask data can only be
3 used in other processes to produce masks, not ASICs. The processes for generating netlists and mask
4 data are not even steps in the manufacture of masks, let alone ASICs. There are hundreds of
5 manufacturing steps that lie between the end product of the processes of the '432 patent and masks and
6 hundreds of additional manufacturing steps that lie between the masks and the manufactured ASICs.
7 Heynes Decl. at ¶ 20. This case fits squarely within the Federal Circuit's analysis in *Bayer*. An ASIC
8 is not a product "made by" any process described in the '432 patent, and the process that *is*
9 contemplated by the '432 patent merely generates "design information," which is not a manufactured
10 product as required by Section 271(g).

11 The computer-aided design methods claimed in Ricoh's '432 patent do not describe the steps of
12 any process for the manufacture of a physical ASIC, but produce only information related to the *design*
13 of the product. Although Ricoh's Amended Complaint alleges that the Customer Defendants infringe
14 the '432 patent by "importing into the United States, application specific integrated circuits made with
15 the use and/or by the process of one or more of claims 13-17 of the '432 patent," the Court has made it
16 clear in its Claim Construction Order that the claimed process **simply does not include**
17 **manufacturing**. Ricoh's allegations are not sufficient to make out a cause of action under Section
18 271(g). The method claimed in Ricoh's patent is, at best, a precursor or predicate method to the
19 manufacture of physical goods, and cannot, as a matter of law, be enforced under Section 271(g).
20 Therefore, summary judgment of noninfringement is proper, and the Court should grant this Motion on
21 behalf of the Customer Defendants.

22
23
24
25
26
27
28

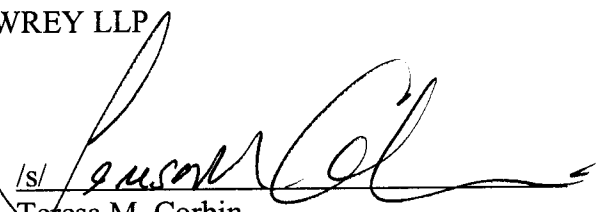
1 IV. CONCLUSION

2 As detailed above, the Customer Defendants cannot be accused of importing a “physical
3 product” that is “made by” the patented methods described in the ‘432 patent. As recognized by the
4 Court in its Claim Construction Order, the method set forth in the ‘432 patent produces information
5 identifying designs for integrated circuits—not the chips themselves or any other physical product. As
6 such, and in accordance with the Federal Circuit’s analysis and clarification of Section 271(g), relief is
7 simply not available to a patentee—such as Ricoh—where there are no “physical goods that are
8 manufactured *directly* by the patented process.” Accordingly, as a matter of law, the Customer
9 Defendants cannot infringe the ‘432 patent under § 271(g), and the Court should enter summary
10 judgment of noninfringement under § 271(g) in their favor.

11
12 Dated: August 9, 2005

Respectfully submitted,

13 HOWREY LLP

14
15 By: /s/ 

16 Teresa M. Corbin
17 Attorneys for Defendants
18 AEROFLEX INCORPORATED, AMI
19 SEMICONDUCTOR, INC., MATROX
20 ELECTRONIC SYSTEMS, LTD.,
21 MATROX GRAPHICS INC., MATROX
22 INTERNATIONAL CORP., MATROX
23 TECH, INC., and AEROFLEX
24 COLORADO SPRINGS, INC.
25
26
27
28

1 Teresa M. Corbin (SBN 132360)
Christopher Kelley (SBN 166608)
2 Jaclyn C. Fink (SBN 217913)
HOWREY LLP
3 525 Market Street, Suite 3600
San Francisco, California 94105
4 Telephone: (415) 848-4900
Facsimile: (415) 848-4999
5

6 Attorneys for Plaintiff SYNOPSYS, INC.
and for Defendants AEROFLEX INCORPORATED,
7 AMI SEMICONDUCTOR, INC., MATROX
ELECTRONIC SYSTEMS, LTD., MATROX
8 GRAPHICS, INC., MATROX INTERNATIONAL
CORP., MATROX TECH, INC. and AEROFLEX
9 COLORADO SPRINGS, INC.

10 UNITED STATES DISTRICT COURT
11 NORTHERN DISTRICT OF CALIFORNIA
12 SAN FRANCISCO DIVISION

13 RICOH COMPANY, LTD.,
14

15 Plaintiff,

16 vs.

17 AEROFLEX INCORPORATED, et al.,
18

19 Defendants.
20

21 SYNOPSYS, INC.,
22

23 Plaintiff,
24

25 vs.
26

27 RICOH COMPANY, LTD.,
28

Defendant.

) Case No. C03-04669 MJJ (EMC)

) Case No. C03-2289 MJJ (EMC)

) **[PROPOSED] ORDER GRANTING**
) **DEFENDANTS' MOTION FOR SUMMARY**
) **JUDGMENT OF NONINFRINGEMENT**
) **UNDER 35 U.S.C. §271(g)**

) Date: August 9, 2005

) Time: 9:30 a.m.

) Courtroom: 11, 19th Floor

) Judge: Martin J. Jenkins

1 On July 5, 2005, Defendants Aeroflex Incorporated, AMI Semiconductor, Inc., Matrox
2 Electronic Systems, Ltd., Matrox Graphics, Inc., Matrox International Corp., Matrox Tech, Inc., and
3 Aeroflex Colorado Springs, Inc. (collectively the "Customer Defendants") filed a Motion for Summary
4 Judgment of Noninfringement Under 35 U.S.C. §271(g). The matter, having been fully briefed, came
5 before the Court on August 9, 2005.

6 The motion, the memoranda, and supporting evidence of the parties having been considered,
7 and oral argument having been heard, the Court GRANTS Customer Defendants' Motion for Summary
8 Judgment of Noninfringement Under 35 U.S.C. §271(g) of Claims 13-17 of U.S. Patent No. 4,922,432.


9 This order is a final determination of the issues raised in Customer Defendants' Motion for
10 Summary Judgment of Noninfringement Under 35 U.S.C. §271(g), and these issues are not subject to
11 future proceedings prior to a final order of judgment in this case.

12
13 IT IS SO ORDERED.

14
15 DATED: _____

The Honorable Martin J. Jenkins
United States District Court Judge

16
17
18 Submitted August 9, 2005 by:
19 HOWREY LLP

20
21 By: /s/ 

22 Teresa M. Corbin
23 Attorneys for Defendants
24 AEROFLEX INCORPORATED, AMI
25 SEMICONDUCTOR, INC., MATROX
26 ELECTRONIC SYSTEMS, LTD., MATROX
27 GRAPHICS INC., MATROX
28 INTERNATIONAL CORP., MATROX
TECH, INC., and AEROFLEX COLORADO
SPRINGS, INC.